Prevalence of child sexual abuse in Switzerland: a systematic review

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Abstract: BACKGROUND: Although child sexual abuse (CSA) is considered to be a significant health risk, there is no systematic overview of studies that have investigated the prevalence of CSA in Switzerland. OBJECTIVES: To conduct a systematic review of studies on the prevalence of CSA in Switzerland. METHODS: A literature search was conducted using several online bibliographic databases. In addition, experts in the field in Switzerland were contacted to find studies that had not been published in academic journals. Studies were selected on the basis of predefined criteria. Because heterogeneity of studies did not allow meta-analytic calculations, data were suitably structured and summarised according to the most common types of CSA. RESULTS: Fifteen studies met inclusion criteria. Probably due to heterogeneity regarding definition and non-validated assessment of CSA, reported prevalence estimates varied greatly across studies. Prevalence rates were consistently higher for girls (up to 40%) than for boys (up to 11%). The most prevalent CSA with contact appears to be "perpetrator fondled victim", and the most common form of non-contact CSA was "exhibitionism". DISCUSSION: Due to inconsistent findings, conclusions that can be drawn are limited. However, results indicate that CSA prevalence rates in Switzerland are high and comparable to other European countries. In future, representative studies need to be conducted using a validated instrument based on internationally recognized definitions of CSA to obtain valid assessments of the prevalence of CSA in Switzerland.

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Prevalence of child sexual abuse in Switzerland: a systematic review

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Summary

BACKGROUND: Although child sexual abuse (CSA) is considered to be a significant health risk, there is no systematic overview of studies that have investigated the prevalence of CSA in Switzerland.
OBJECTIVES: To conduct a systematic review of studies on the prevalence of CSA in Switzerland.
METHODS: A literature search was conducted using several online bibliographic databases. In addition, experts in the field in Switzerland were contacted to find studies that had not been published in academic journals. Studies were selected on the basis of predefined criteria. Because heterogeneity of studies did not allow meta-analytic calculations, data were suitably structured and summarised according to the most common types of CSA.
RESULTS: Fifteen studies met inclusion criteria. Probably due to heterogeneity regarding definition and non-validated assessment of CSA, reported prevalence estimates varied greatly across studies. Prevalence rates were consistently higher for girls (up to 40%) than for boys (up to 11%). The most prevalent CSA with contact appears to be "perpetrator fondled victim", and the most common form of non-contact CSA was "exhibitionism".
DISCUSSION: Due to inconsistent findings, conclusions that can be drawn are limited. However, results indicate that CSA prevalence rates in Switzerland are high and comparable to other European countries. In future, representative studies need to be conducted using a validated instrument based on internationally recognized definitions of CSA to obtain valid assessments of the prevalence of CSA in Switzerland.

Key words: child sexual abuse; prevalence; Switzerland; sexual violence; sexual molestation; children; adolescents

Introduction

Following the official definition of child abuse and neglect by the the International Society for Prevention [1], the Swiss Foundation for Child Protection (*Kinderschutz Schweiz*) defines child sexual abuse (CSA) as involving a child in sexual activity that the child does not fully comprehend, is unable to give informed consent to, or is not developmentally prepared for. The relationship between perpetrator and victim is defined as one of responsibility, trust, and/or power being abused by the perpetrator to gratify his or her sexual needs [2]. Swiss criminal law prohibits all kinds of sexual activity between an adult and a child (<16 years) if there is an age difference of more than 3 years, between a minor (<18 years) and an adult if they are in a relationship of dependency (e.g. teacher-student), and all sexual activity that is enforced without the other person's consent, regardless of the ages of victim and perpetrator [4]. That means that CSA cannot only occur between a child and an adult but can also occur among children or adolescents, a fact that has long been neglected [4].
CSA comprises various forms of sexually abusive behaviours with (e.g. forced intercourse, fondling, oral sex) or without physical contact (e.g. exhibitionism, voyeurism, sexual harassment). Systematic reviews of the international literature show that the estimates of prevalence of CSA vary considerably (2–62%) due to variations in definition (e.g. age limit of childhood) and study design [5]. Yet the results clearly show that the experience of CSA is highly prevalent in all societies that have been investigated; the most recent meta-analysis reported mean estimates of 20% for women and 8% for men [6]. Due to the magnitude of the problem and the serious impacts that CSA can have on physical and mental health, CSA

should be regarded as a highly significant health risk comparable to other health risk factors such as alcohol abuse, high blood pressure and physical inactivity [5, 7].

Systematic reviews of prevalence estimates and health consequences of CSA are important for the development of prevention programmes and the provision of support. No systematic overview of studies that investigated CSA prevalence in Switzerland is available. Although previous reviews of the international or European literature also included Swiss studies, they only considered studies that were published in academic journals and focused exclusively on CSA [6, 8]. Other forms of publication (e.g. research reports, books) or studies that examined the prevalence of CSA subsidiary to other research questions were not included. The aim of this study, therefore, was to conduct a systematic review of all studies assessing CSA prevalence in Switzerland, regardless of the publication medium. The objectives were to (1) gain an evidence-based estimation of the prevalence of CSA in Switzerland, and (2) identify serious gaps in the current state of research and point out possible directions for future research.

Methods

Because of insecurities regarding the data situation prior to compilation of the review, no protocol of the planned methodological process could be established.

Data sources and search strategy

A literature search was conducted for studies reporting data on the prevalence or incidence of CSA in Switzerland. The deadline for the literature search was February 2010. No limits were set with regard to year of publication. In a first step, the following databases were searched: Pubmed, Embase, Cinahl, PsychInfo, Psyndex, the Cochrane database of systematic reviews, ProQuest, NDLDT, and all Swiss databases for Swiss electronic dissertations (see http://www.hbz.uzh.ch/index.php?option=com_nxtlinks&catid=253&Itemid=131). Searches were conducted using both medical subject headings (MeSH) and keywords. Mainly English keywords were used but certain databases (e.g., Psyndex, databases for Swiss electronic dissertations) were also searched with keywords in German, Italian, and French. Except for language of keywords, the same search strategy was used across databases. Figure 1 shows the specific keywords and MeSHs used and how they were combined with Boolean operators.

This initial literature search yielded 329 entries. In a second step, we asked experts in the field working in Switzerland whether they knew of any published or unpublished studies on the prevalence/incidence of CSA in Switzerland. We also checked reference lists in relevant articles and book chapters: this yielded a further 23 studies and one set of unpublished data.

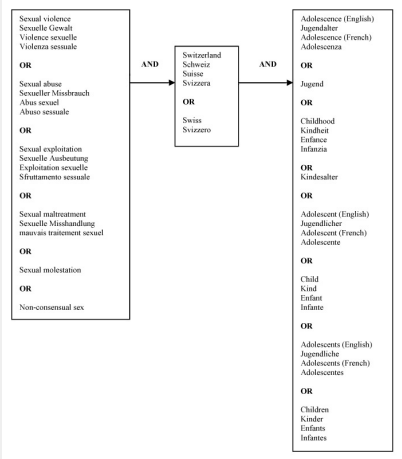

Figure 1

Keywords and Boolean operators used for database searches.

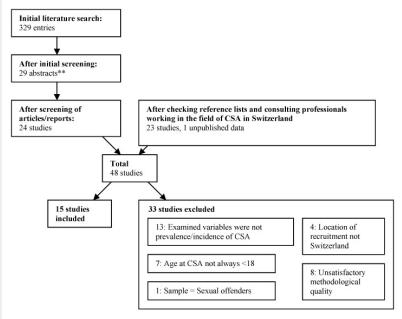

Figure 2

Flowchart of study selection.

Study selection

Figure 2 shows the study selection process. First, titles and abstracts of articles that were found through the electronic database search (N = 329) were screened for eligibility by one of the authors (V.S.). For this step, any study on CSA conducted in Switzerland or in collaboration with a Swiss academic institution was regarded as eligible. After this first selection, 29 abstracts remained, for which the full publications were obtained and skimmed. As a result, a further 5 articles had to be excluded: one was a commentary, three [9–11] presented data on CSA prevalence that had already been published in a previous study [12–14], and one [15] presented the prevalence of CSA of a subgroup (suicide attempters) of the whole study sample, for which the prevalence of CSA was published one year later [16]. The total number of eligible studies resulting from this initial screening, consultation of experts and checking of reference lists, was 48. Among the studies found was no existing literature review on CSA prevalence in Switzerland.

The 48 studies selected were then reviewed independently by two authors (V. S., T. M.) to determine final inclusion. When necessary, corresponding authors of papers were contacted for additional information or clarifications of inconsistencies in the texts. Articles or reports were included if they met the following criteria: (a) outcome: standardised assessment of prevalence and/or incidence of CSA; (b) location of participant recruitment: Switzerland; (c) sample: population sample (representative or sample of convenience), clinical sample (recruitment through in- and outpatient mental health services), or number of reported cases to agencies. Participants who experienced CSA were younger than age 18* at CSA incidence or still in compulsory education (grade 1 to 9). Age of participants at study participation was not relevant; (d) language of publication: English, German, Italian, or French; e) satisfactory methodological quality: e.g. satisfactory documentation of CSA operationalisation; adequate statistical procedures; use of basic statistics; if there was

a mixed sample of participants who experienced CSA and people who experienced other forms of violence in childhood and/or adolescence (e.g. physical maltreatment), data on CSA had to be analysed separately; satisfactory quality of reporting. For 11 studies, additional discussion/clarification was required to determine inclusion. As a result of this selection process, 15 studies could be included. Figure 2 presents the reasons for the exclusion of the other 33 studies. Table 1a lists the excluded studies.

* In Switzerland the legal age of consent is 18. Sexual violence experienced by people aged 18 or older is considered rape or sexual assault but not CSA.

Assessment of methodological quality

In systematic reviews and meta-analysis it is common to perform a standardised assessment of methodological quality to determine the validity of the studies included and perform meta-analytic calculations between the studies' methodological quality and the reported outcomes [17]. However, after careful consideration we decided not to apply a quality assessment of this kind for four reasons: (1) current standardised quality assessment tools are specifically developed for randomised treatment outcome studies (e.g. [18]) and not for prevalence studies; (2) we could not find any pre-existing methodological checklist that had been applied in previous systematic reviews on CSA prevalence and could have been adapted to the present study; (3) we carefully considered developing our own quality assessment list but came to the conclusion that it was not possible to select and define reasonable assessment criteria objectively (e.g. sample size); and (4), because the design of the studies included was very heterogeneous it would have been impossible to perform meta-analytic calculations regarding the methodological quality of studies (see also paragraph *Data synthesis and analysis*). We therefore decided to report on the studies' methodological quality through narrative description (see paragraph *Description of studies* and *Discussion* section below).

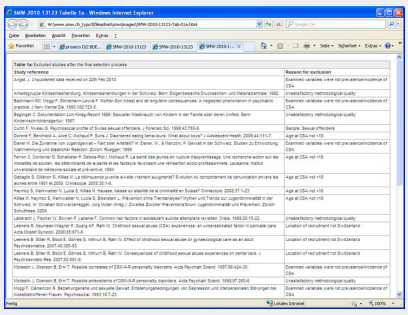

Table 1a

Excluded studies after the final selection process.

Data extraction

The characteristics of the studies included (e.g., sample sizes, age of participants; see table 1b) and estimated lifetime and 12-month prevalence rates of CSA (see table 2) were extracted and coded into standardised data extraction forms. Because CSA is defined as an event that occurs before the age of 18, lifetime prevalence of CSA means the number of individuals in a statistical population that at some point in their lives have experienced sexual violence before the age of 18.

The coding was double checked by two authors (V.S., M. A. L.) independently, who resolved any disagreements and uncertainties by discussion. All decisions were documented.

Data synthesis and analysis

The use of meta-analysis is often advocated to synthesise analytically the evidence from different studies on particular epidemiological outcomes [19]. However, when combining observational studies, heterogeneity in study design and populations is expected. This is a particular problem for a meta-analysis of prevalence studies on CSA, where a clear definition of the outcome is lacking and a single summary prevalence estimate will be inappropriate.

To further investigate this issue, we studied the heterogeneity of the prevalence estimates through the calculation of additional 95% confidence intervals. For example, for non-contact CSA among boys, the confidence intervals obtained from four different studies reporting information on this item were [27.0%, 36.7%] (Study no. 2), [10.8%, 16.4%] (no. 3), [4.1%, 6.9%] (no. 4) and [0.6%, 1.7%] (no. 6). All four 95% confidence intervals do not overlap, which indicates that the prevalence estimates in any two of these four studies are significantly different at a conventional 5% level. Similar results were obtained for other items, for both boys and girls. Because of the huge heterogeneity between study prevalence estimates, we concluded that a meta-analysis providing a single summary prevalence estimate was not appropriate.

Instead, we suitably structured and summarised the extracted prevalence estimates that had been reported by the authors of the studies. We concluded that the most sensible way to do this was by reporting estimate ranges for the following CSA categories (see table 2):

1. Experience of at least one abusive sexual behaviour: summarised category when several forms of CSA were assessed in the study
2. Non-contact CSA: summarised category of all items assessing single forms of non-contact abuse
3. Most commonly applied items assessing single forms of non-contact CSA (e.g. exhibitionism)
4. Contact CSA without penetration: summarised category of all items assessing single forms of non-penetrative contact abuse
5. Most commonly applied items assessing single forms of contact CSA without penetration (e.g. oral sex)
6. CSA with penetration: summarised category of the items "forced intercourse" and "penetration with finger and/or object"
7. Prevalence estimates assessed using one general item (e.g. "Have you ever experienced sexual violence?")

Estimate ranges are presented for reported lifetime as well as for 12-month prevalence rates. Because Ribeaud and Eisner [20] had only reported 30-month prevalence rates for some items, we calculated 12-month prevalence by applying the operator (:5x2). If available, data was listed both separately and combined for girls and boys. Finally, for each range of estimated prevalence the numbers of the studies on which the findings are based are presented.

Results

Description of studies included in this review

Table 1b summarises the main characteristics of the 15 studies included. The studies are numbered 1 to 15. Except for Jud et al. [21] (no. 15), all studies were surveys with a cross-sectional retrospective design. Jud et al. conducted what is called an agency study, in which the number of cases of CSA and other forms of child maltreatment reported to University Children's Hospital Zurich (between 2003–2006) was assessed retrospectively. The 15 studies included were published between 1993 and 2010: five in an academic journal (nos. 1, 3, 5, 12, 15), five in form of a book or book chapter (nos. 2, 7, 8, 9, 13), and another five as a research report (nos. 4, 6, 10, 11, 14). All studies reported lifetime prevalence rates. Four studies additionally provided 12-month or 30-month prevalence rates (nos. 7, 9, 13, 14), which refer to the years 1997, 1998, 1999, 2000, 2006, or 2007 respectively.

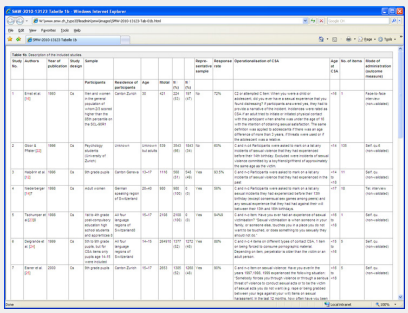

Table 1b

Description of the included studies.

Only five studies focused exclusively on the prevalence of CSA (nos. 1–5). Most of the others examined CSA prevalence as a peripheral research question in large surveys on adolescent health (e.g. no. 6) or general victimisation (e.g. no. 7). The participants were adolescents in 11 studies (nos. 3, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15) and adults in four (nos. 1, 2, 4, 12). Sample sizes varied between N = 223 (no. 12) and N = 7196 (no. 8). Two studies involved only female participants (nos. 4, 5). All others examined both sexes. In five studies (e.g., nos. 5, 6, 8, 10, 11) participants came from all over Switzerland, whereas most of the others focused on a specific canton (nos. 1, 3, 7, 9, 12,13, 14).

Ten studies included representative samples at the national or cantonal level (nos. 3–8, 10, 11, 13, 14). Response rates were considered very high (≥90%) in seven studies (nos. 3, 5, 7, 9–11, 13), high (between ≥70 and <90%) in four studies (nos. 1, 6, 8, 14), and medium (between 56 and <70%) in three studies (nos. 2, 4, 12).* Regarding the data collection mode, in most studies (nos. 2, 3, 5–14) self-administered questionnaires were used. Only one study (no. 1) used face-to-face interviews, and another (no. 4) used telephone interviews.**

* The agency-study design used by Jud et al. (2010) does not allow the calculation of participation rates.
** Again, the question of mode of administration is not applicable to the study of Jud et al. (2010).

Studies considerably differed in their definition and operationalisation of CSA. Main criteria that were defined inconsistently were: demarcation of the victim's age at CSA, types of sexually abusive behaviours assessed, the number of items applied (between one and 18; mean = 5.4), and the actual formulation of the items. Importantly, none of the studies used validated measures. In seven (nos. 1, 5, 7, 9, 10, 13, 14) of the 15 studies, CSA was measured by a single general screening question (e.g., "Have you ever had an experience of sexual violence?"). Most of these studies were surveys on general victimisation of adolescents. Table 2 lists the specific sexual abusive behaviours that were assessed by those studies that used more than one question. Notably, more types of non-contact sexual abuse were assessed than forms of contact sexual abuse. The types of CSA most frequently asked about were "forcing minor to consume pornography," "forcing minor to fondle perpetrator," and contact CSA with penetration.

Lifetime prevalence

Table 2 lists the ranges of lifetime prevalence estimates for the single CSA items and summarised CSA categories described above under "data synthesis and analysis". For most forms of CSA, the ranges are very wide (up to 30). This indicates that prevalence estimates of the studies vary markedly. Whereas there are no obvious differences in prevalence estimates between contact und non-contact forms, forms of CSA with penetration are less common (up to 5.6% for girls and 1.2% for boys) than non-penetrative CSA (up to 37.0% for girls and 22.0% for boys). When looking at the percentage of participants that ever experienced any form of CSA, prevalence rates assessed by a single general item are considerably lower (up to 18.1% for girls and 3.0% for boys) than when rates were calculated on the basis of several items assessing specific forms of CSA (up to 39.8% for girls and 10.9% for boys). The results also indicate that the most commonly experienced form of non-contact CSA is exhibitionism, regardless of the sex of the victims. "Being fondled by the perpetrator" seems to be the most common form of contact CSA, again for both girls and boys.

Table 2. Ranges of reported lifetime and 12-month prevalence estimates of child sexual abuse reported by Swiss studies.

	Life prevalence						**12 months prevalence**[2]					
Categories/forms of CSA	♀	**Studies (No.)**[2]	♂	**Studies (No.)**	♀/♂	**Studies (No.)**	♀	**Studies (No.)**	♂	**Studies (No.)**	♀/♂	**Studies (No.)**
At least one experience of CSA	12.7-39.7	3,4,8	2.2-10.9	3,8	6.4	8	N.a[3]	–	N.a	–	N.a	–
Non-contact	0.6–34.0	2, 3,4, 6, 11	1.1-15.0	2, 3, 6, 11	0.7–0.7	8, 11	18.3[4]	7	2.5[4]	7	7.9–12.8[4]	7, 9, 13
- Sexual harassment	0.9	3	0.4	3	N.a	–	18.3	7	2.5	7	7.9–12.8	7, 9, 13
- Exhibitionism	12.1–28.0	2, 3	2.9–10.0	2, 3	N.a	–	N.a	–	N.a	–	N.a	N.a
- Forcing minor to consume pornographic material	0.6–6.0	2, 3, 4, 6, 11	1.1-8.0	2, 3, 6, 11	0.7–0.7	8, 11	N.a	–	N.a	–	N.a	–
- Forcing minor to show naked or certain body parts such as genitalia to perpetrator	5.3–11.0	2, 3, 4	2.4-10.0	2, 3	N.a	–	N.a	–	N.a	–	N.a	–
- Perpetrator took photographs or films when victim was nude or during sexual acts	0.7–4.0	2, 3	0.5-3.0	2, 3	N.a	–	N.a	–	N.a	–	N.a	–
- Forcing minor to watch perpetrator while doing sexual acts such as masturbating	2.4–5.5	3, 4	1.5	3	N.a	–	N.a	–	N.a	–	N.a	–
Contact without penetration	4.8–37.0	2, 3, 4, 6, 11	1.7–22.0	2, 3, 6, 11	2.9–13.0	8, 11, 12	N.a	–	N.a	–	N.a	–
- Oral sex (on perpetrator)	1.5–5.0	2, 4	3.0	2	N.a	–	N.a	–	N.a	–	N.a	–
- Forcing minor to fondle perpetrator (e.g. manual sexual gratification)	2.4–12.0	2, 3, 4, 6, 11	0.8–7.0	2, 3, 6, 11	1.21.3	8, 11	N.a	–	N.a	–	N.a	–
- Perpetrator fondled victim	4.8–37.0	2, 3, 4, 6, 11	1.7–22.0	2, 3, 6, 11	2.9–13.0	8, 11	N.a	–	N.a	–	N.a	–
Contact with penetration[5]	1.0–5.6	3, 4, 6, 11	0.8–1.2	3, 6, 11	0.7–0.7	8, 11	N.a	–	N.a	–	N.a	–
One general item	8.1–18.1	1, 5, 10, 14	1.5–3.0	1, 10, 14	3.6–6.0	7,14	2.8–5.3	7, 9, 13, 14	0.3-1.9	7, 9, 13, 14	0.9-3.6	7, 9, 13, 14

[1] The ranges of lifetime prevalence of the categories summarised do not always exactly fit the lowest and the highest estimates of the items assessing the specific forms of CSA. This is because only most commonly applied items are presented. However, less commonly applied items assessing sexual abusive behavior were also included in the calculation of the ranges for the summarised categories (e.g. compare range of lifetime prevalence estimates for non-contact CSA for women and the ranges for the single non-contact CSA forms: Whereas the highest estimate for the non-contact CSA category is 34.0%, the highest estimate with regard to the single forms is 28.0%).

[2] Refers to the years 1997, 1998, 1999, 2000, 2006, or 2007

[3] N.a = no data available

[4] Refers exclusively to sexual harassment at school and on the way to school.

[5] includes penetration with object or finger

12-month prevalence

12-month prevalence estimates of CSA were available only for sexual harassment in the school environment and for sexual victimisation assessed by a single general item (see table 2). Estimates assessed by general items suggest that the 12-month prevalence of the experience of sexual violence is up to 5.3% for girls and up to 1.9% for boys. Data on sexual harassment presented separately for girls and boys suggest that almost every fifth girl and one in 40 boys had become a victim of school-related sexual harassment in the previous year. Prevalence estimates range from 8–13% for school-related sexual harassment when data is combined for girls and boys.

Reported cases to agencies

Jud et al. (no. 15) is an agency study and not a population-based prevalence study (see “description of studies” above), those findings could not be included in table 2. In brief, Jud et al. (2010) [21] found that 37% of the children (N = 1479) that had been referred to the child protection team at University Children’s Hospital Zurich between 2003 and 2006 were alleged victims of CSA; three quarters of them were girls (75.4%).

Discussion

The aim of this study was to conduct a systematic review and meta-analysis of studies on the prevalence of CSA in Switzerland. We conducted a systematic comprehensive literature search followed by a standardised selection process, which resulted in 15 studies that fulfilled the inclusion criteria. It was striking that only a minority of the studies included focused on CSA and only a few had been published in scientific journals. The rest of the studies had been published in the form of books, book chapters, or research reports, which we were able to retrieve only by intensive correspondence with professionals in the field and by screening general health and victimisation surveys. This suggests that CSA has not yet been established as an academic research subject in Switzerland.

Some positive methodological characteristics stand out in the studies included in the review: Overall, they examined samples of considerable size and achieved high response rates, and the samples were representative in two thirds of the studies. Most focused exclusively on adolescents, an option which, compared to studying adult samples, reduces the potential recollection bias due to retrospection [32, 33]. This positive finding is surprising because it is not uncommon in international CSA research to examine adult samples [34].

However, the studies included also have serious methodological weaknesses. First of all, no consistent definitions of CSA were used. As a consequence, operational definitions of CSA varied greatly. Previous research showed that disparate (operational) definitions of CSA are the main reason for pronounced variations in prevalence estimates, and thus make comparison between results and aggregation of data difficult [6, 33, 35]. Further, all of the studies used non-validated measures; thus significantly reducing the reliability and validity of results. Moreover, almost half of the studies assessed CSA by a single general screening question. General screening questions are believed to seriously underestimate the prevalence of CSA compared to multiple questions asking about specific types of CSA [33, 36].

Another neglected methodological issue in previous research on CSA in Switzerland is the fact that no study has ever comprehensively assessed the 12-month prevalence for the different types of CSA. Data on 12-month prevalence of CSA in Switzerland is only available for sexual harassment in the school environment and for estimates assessed by a single general item. However, because 12-month prevalence measurements are less prone to retrospective bias than lifetime prevalence assessments, they are essential to obtain a valid picture of the occurrence of CSA in the Swiss population under age 18.

Finally, it is necessary to address two further problems with regard to the methodological quality of the current evidence on prevalence of CSA in Switzerland. Firstly, the quality of reporting was poor in a considerable number of the studies. Many authors needed to be contacted several times for additional basic information (e.g. age range, response rates). Second, about a third of the studies had to be excluded in the final selection process, either because of serious shortcomings in methodological quality or because they investigated mixed samples of adolescents and adults, which does not allow the prevalence of CSA to be distinguished from the prevalence of sexual assaults against adults.

Due to the methodological issues mentioned above, and in particular due to the heterogeneity in definition of CSA and study design, it was not possible to perform meta-analytic calculations. Instead, findings were systematically organised and summarised on the basis of the data that the authors of the studies had presented. Ranges of reported estimates were large for most items, reflecting the heterogeneity between studies. However, with no possibility of calculating weighted mean-effect sizes (a type of meta-analytic calculation), the conclusions that can be drawn from the studies are limited: Overall, previous research indicates that CSA is highly prevalent in Switzerland, as it is in most other countries in the world [6]. Consistent with international findings, girls are more likely to become victims of sexual violence than boys. The variability in methodology and estimated prevalence rates makes comparison with international research difficult. However, considering that the most recently published international mean prevalence rates of CSA are around 20% for girls and 8% for boys [6], the results reported by Swiss studies fit quite well into this picture. Furthermore, they are consistent with the international findings that contact forms of CSA are at least equally prevalent as non-contact CSA, which is often regarded as less severe [5, 37]. Yet, when looking at prevalence rates of contact and non-contact forms of CSA, it becomes apparent that prevalence estimates of less severe forms of CSA such as exhibitionism and “being fondled by perpetrator” are higher than more severe forms of CSA such as oral sex or intercourse. Finally, the findings of this systematic review support previous assumptions that general screening questions underestimate the prevalence of CSA. They should therefore be avoided [33].

In addition to the limited evidential value, this systematic review suffers some further limitations. Despite comprehensive efforts to retrieve all the available data on CSA prevalence rates in Switzerland, we might still have failed to identify some non-referenced publications such as reports from child protection teams or counselling services. This risk of incomplete retrieval of data may have been reduced if two authors (and not only one) had independently performed literature searches according to the pre-defined search strategies. Furthermore, it is likely that the results of this review are biased because not all unpublished data could be accessed. Publication bias is a common and well-documented problem in meta-analysis and systematic reviews. However, despite its limitations, this systematic review makes an significant and indispensable contribution to research on CSA in Switzerland, since it systematically and comprehensively reviewed, structured, and summarised previous research on the prevalence of CSA in this country. It was possible to retrieve many studies that were not accessible via scientific databases and academic journals. The review reveals how seriously neglected CSA research has been in Switzerland, despite its importance for public health. CSA prevalence has been investigated mainly in the form of a subsidiary research question by researchers not specialised in the field. Furthermore, methodological weaknesses of studies limit the reliability and validity of the results. For the first time the systematic compilation of the data provides a comprehensive overview of previous research activities and gaps, pointing in important

future research directions: if we want to know how prevalent CSA is in Switzerland, where and when it happens, and who the victims and the perpetrators are, it will be necessary to conduct representative studies surveying children and adolescents in all four language regions of Switzerland, using a validated instrument that comprises various forms of CSA, operationalised on the basis of internationally recognised definitions [38]. An example of that kind of instrument is the Juvenile Victimisation Questionnaire (JVQ), which could be translated into German [39]. Otherwise, CSA will remain a neglected serious health issue affecting the youngest and weakest of a country that praises its commitment to protecting human rights.

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